

APPLICATION FOR CERTIFICATION  
00-AFC-14

# El Segundo Power Redevelopment Project

Response to Data Requests



Submitted to the

**California Energy Commission**

Submitted by

**El Segundo Power II LLC**

## RESPONSE TO DATA REQUESTS

### TABLE OF CONTENTS (UPDATED MAY 4, 2001)

---

Air Quality .....	AQ-1
Biological Resources .....	BIO-1
Cultural Resumes .....	CUL-1
Cumulative Impacts .....	CUM-1
Efficiency .....	EFF-1
Geology and Paleontology .....	GEO-1
Hazardous Material Handling .....	HMH-1
Land Use .....	LU-1
Noise .....	NOI-1
Project Description.....	PD-1
Socioeconomics .....	SOC-1
Soil and Water.....	SOIL-1
Traffic & Transportation.....	T&T-1
Transmission Line Safety & Nuisance .....	TLSN-1
Transmission System Engineering.....	TSE-1
Visual Resources.....	VIS-1
Waste Management.....	WM-1
Worker Safety .....	WS-1

## RESPONSE TO DATA REQUESTS

### LIST OF ATTACHMENTS (UPDATED MAY 4, 2001)

---

Attachment 1	Data Request No. 1 – Recently Acquired ERC Certificates
Attachment 2	Biological Resources Data Requests – Revised Tables 5.6-8 through 5.6-13 (Abundance and Biomass Data for 1997 – 1999 for Units 1, 2, 3, and 4)
Attachment 3	Data Request No. 54 – Revised Figure 5.6-8 (Near-Shore Environment Within Santa Monica Bay), Indicating Location of Pratte’s Reef
Attachment 4	Data Request No. 12 – Revised Figure J-3 (Kramer Staging Area)
Attachment 5	Data Request No. 15 – Sensitivity Analysis of Water Lines Associated with the El Segundo Power Redevelopment Project, Los Angeles County, California
Attachment 6	Data Request No. 77 – Revised Table 5.20-1 (El Segundo Power Redevelopment Project Cumulative Projects List)
Attachment 7	Data Request No. 19 – Figure 5.19-1 (Plant Heat and Material Diagram)
Attachment 8	Data Request No. 23 – Revised Grading and Drainage Plans Highlighting Cut and Fill Areas
Attachment 9	Data Request No.24 – Revised Figure 5.3-2 (Geologic Units in the Project Area) indicating Oil Wells in the Project Area
Attachment 10	Data Request No. 25 – Beach Erosion Control Plan
Attachment 11	Data Request No. 70 – Figure 70-1 (Predicted Ammonia Spill Scenario)
Attachment 12	Data Request No. 26 – Final Recorded Parcel Map for the ESGS and SCE Tank Farm Properties
Attachment 13	Data Request No. 27 – Legal Property Descriptions and Property Maps of the ESGS and SCE Tank Farm Properties
Attachment 14	Data Requests No. 40 & 41 – Tank Farm Parcels
Attachment 15	Data Requests No. 41 – Revised Grading and Drainage Plans Showing Parcel Information
Attachment 16	Data Request No. 61 - Revised Table 3.12-1 (LORS Related to Facility Design)

## RESPONSE TO DATA REQUESTS

### LIST OF ATTACHMENTS (UPDATED MAY 4, 2001)

---

Attachment 17	Data Request No. 28 – Tabular $L_{eq}$ , $L_{50}$ , and $L_{90}$ Noise Data
Attachment 18	Data Request No. 56 – KOP #7 Analysis and Photo Simulations
Attachment 19	Data Request Nos. 74 and 121 -Updated Figure 3.5-1A and 3.5-1B, Site Grading and Drainage Plan with location of Outfall Structure 002, and the location of new generator lead poles
Attachment 20	Data Request No. 131 – “Will Serve” letter from West Basin Municipal Water District
Attachment 21	Data Request No. 75 - Figure 74s, 230kV Transmission Line Corridor from ESGS to El Nido Substation
Attachment 22	Data Request No. 93 – Figures 93-1 and 93-2, Predicted Ammonia Release Scenarios at 75ppm
Attachment 23	Data Request No. 156 - California Coastal Commission Procedural Memo #19, Information Needed in Applications for Shoreline Protective Devices, July 29, 1992
Attachment 24	Supplemental Data Request No. 133 - Revised Figures 5.12-2 and 5.12-3, Updated Noise Monitoring Locations
Attachment 25	Supplemental Data Request No. 134b - Tank Farm Plan
Attachment 26	Supplemental Data Request No. 106 - Simulations of Landscape Screening
Attachment 27	Supplemental Data Request No. 106 - Landscaping Opportunities
Attachment 28	Public Data Request No. 1 - Proposed Conditions of Certification
Attachment 29	Data Request No. 134a – Tank Insertion Loss Calculations

## RESPONSE TO DATA REQUESTS

### LIST OF TABLES (UPDATED MAY 4, 2001)

---

Table 1-1	Summary of Total Offsets Required and Available.....	AQ-3
Table 1-2	Credit Contracts Already Provided to the CEC .....	AQ-3
Table 1-3	Recently Acquired Credits.....	AQ-4
Table 7-1	Number of Individuals of Selected Species Impinged..... 1997 – 1999	BIO-6
Table 8-1	Number of Individuals of Selected Species Impinged..... 1997 – 1999	BIO-8
Table 10-1	Number of Individuals of Selected Species Impinged..... During Heat Treatment 1997 – 1999	BIO-12
Table 83-1	Number of Individuals of Selected Species Impinged..... During Heat Treatment 1997 – 1999	BIO-26
Table CCC-25-1	Number of Individuals of Selected Species Impinged..... 1997 – 1999	BIO-30
Table 7s – 1	Number of Individuals of Selected Species Impinged..... 1997 – 1999	BIO-32
Table 8s – 1	Number of Individuals of Selected Species Impinged..... 1997 – 1999	BIO-33
Table 15-1	Richmond Street District.....	CUL-9
Table 15-2	Other Addresses Evaluated .....	CUL-10
Table 133-1	Summary of Results: Storage Tank “Insertion Loss” ..... Measurements and Analysis	NOI-4

El Segundo Power Redevelopment Project  
(00-AFC-14)  
Response to Data Requests

---

**DATA RESPONSE GUIDE**  
(Updated May 4, 2001)

<b>Data Request</b>	<b>Applicant's Response Date</b>	<b>Source of Data Request</b>	<b>Page</b>
<b>Air Quality</b>			
1	March 28	CEC	AQ-2
2	March 28	CEC	AQ-4
3	March 28	CEC	AQ-4
4	March 28	CEC	AQ-5
5	March 28	CEC	AQ-5
29	March 28	CEC	AQ-6
48	March 28	COES	AQ-6
49	March 28	COES	AQ-7
50	March 28	COES	AQ-7
51	March 28	COES	AQ-8
CCC-10	April 13	CCC	AQ-8
6ss	April 30	CCC	BIO-37
<b>Biological Resources</b>			
6	March 28	CEC	BIO-3
7	March 28	CEC	BIO-5
8	March 28	CEC	BIO-7
9	March 28	CEC	BIO-8
10	March 28	CEC	BIO-10
45	March 28	COES	BIO-13
52	March 28	COES	BIO-13
53	March 28	COES	BIO-13
54	March 28	COES	BIO-15
55	March 28	COES	BIO-16
78	March 28	CCC	BIO-17
79	March 28	CCC	BIO-19
80	March 28	CCC	BIO-20
81	March 28	CCC	BIO-20
82	March 28	CCC	BIO-24
83	March 28	CCC	BIO-24
84	March 28	CCC	BIO-27
85	March 28	CCC	BIO-27
CCC-1	April 18	CCC	BIO-27
CCC-17	April 18	CCC	BIO-28
CCC-25	April 18	CCC	BIO-29
6s	April 18	CEC	BIO-31

El Segundo Power Redevelopment Project  
(00-AFC-14)  
Response to Data Requests

**Data Response Guide (Cont.)**  
(Updated May 4, 2001)

<b>Data Request</b>	<b>Applicant's Response Date</b>	<b>Source of Data Request</b>	<b>Page</b>
7s	April 18	CEC	BIO-31
8s	April 18	CEC	BIO-32
9s	April 18	CEC	BIO-33
81s	April 18	CCC	BIO-33
84s	April 18	CCC	BIO-34
USFWS-1	April 18	USFWS	BIO-34
USFWS-2	April 18	USFWS	BIO-35
USFWS-3	April 18	USFWS	BIO-36
6ss	April 30	CCC	BIO-37
<b>Cultural Resources</b>			
11	March 28	CEC	CUL-2
12	March 28	CEC	CUL-2
13	March 28	CEC	CUL-6
14	March 28	CEC	CUL-6
15	March 28	CEC	CUL-7
16	March 28	CEC	CUL-10
17	March 28	CEC	CUL-11
18	March 28	CEC	CUL-11
90	April 18	CEC	CUL-12
91	April 18	CEC	CUL-12
CCC-18	April 18	CCC	CUL-12
15s	April 18	CEC	CUL-13
16s	May 4	CEC	CUL-14
<b>Cumulative Impacts</b>			
77	March 28	COES	CUM-2
77s	April 18	COES	CUM-5
<b>Efficiency</b>			
19	March 28	CEC	EFF-2
<b>Geology and Paleontology</b>			
20	March 28	CEC	GEO-2
21	March 28	CEC	GEO-3
22	March 28	CEC	GEO-3
23	March 28	CEC	GEO-4
24	March 28	CEC	GEO-6
25	March 28	CEC	GEO-7
CCC-11 (CCC-6)	April 18	CCC	GEO-7

El Segundo Power Redevelopment Project  
(00-AFC-14)  
Response to Data Requests

**Data Response Guide (Cont.)**  
(Updated May 4, 2001)

<b>Data Request</b>	<b>Applicant's Response Date</b>	<b>Source of Data Request</b>	<b>Page</b>
CCC-12 (CCC-7)	April 18	CCC	GEO-8
CCC-13	April 18	CCC	GEO-9
CCC-14	April 18	CCC	GEO-9
CCC-15	April 18	CCC	GEO-9
156	May 4	CEC	GEO-12
<b>Hazardous Material Handling</b>			
70	March 28	COES	HMH-2
71	March 28	COES	HMH-2
72	March 28	COES	HMH-3
73	March 28	COES	HMH-4
92	April 18	CEC	HMH-5
93	April 18, April 30	CEC	HMH-7, HMH-9
94	April 18, April 30	CEC	HMH-7, HMH-13
95	April 18	CEC	HMH-7
<b>Land Use</b>			
26	March 28	CEC	LU-2
27	March 28	CEC	LU-2
40	March 28	CEC	LU-2
41	March 28	CEC	LU-3
61	March 28	CEC	LU-3
65	March 28	CEC	LU-3
66	March 28	CEC	LU-3
67	March 28	CEC	LU-3
CCC-4	April 18	CCC	LU-4
CCC-19	April 18	CCC	LU-4
40s	April 18	CEC	LU-4
66s	April 18	CEC	LU-4
67s	April 18	CEC	LU-5
<b>Noise</b>			
28	March 28	CEC	NOI-2
133	April 13, April 18	CEC	NOI-2
134	April 13, April 18	CEC	NOI-4
CCC-21	April 18	CCC	NOI-5
28s	April 18	CEC	NOI-5
133s	May 4	CEC	NOI-7
134a	May 4	CEC	NOI-7



El Segundo Power Redevelopment Project  
(00-AFC-14)  
Response to Data Requests

**Data Response Guide (Cont.)**  
(Updated May 4, 2001)

<b>Data Request</b>	<b>Applicant's Response Date</b>	<b>Source of Data Request</b>	<b>Page</b>
134b	May 4	CEC	NOI-10
<b>Project Description</b>			
35	March 28	COES	PD-3
36	March 28	COES	PD-3
37	March 28	COES	PD-3
38	March 28	COES	PD-3
39	March 28	COES	PD-3
42	March 28	COES	PD-4
43	March 28	COES	PD-4
44	March 28	COES	PD-4
46	March 28	COES	PD-4
47	March 28	COES	PD-4
58	March 28	COES	PD-5
59	March 28	COES	PD-5
60	March 28	COES	PD-5
88	March 28	COES	PD-5
CCC-5	April 18	CCC	PD-6
CCC-6	April 18	CCC	PD-6
CCC-7	April 18	CCC	PD-7
COES-1	April 18	COES	PD-7
COES-2	April 18	COES	PD-8
38s	April 18	COES	PD-8
46s	April 18	COES	PD-9
88s	April 18	COES	PD-9
Public-1	May 4	COMB	PD-10
Public-2	May 4	COMB	PD-10
Public-3	May 4	COMB	PD-11
Public-4	May 4	COMB	PD-11
Public-5	May 4	COMB	PD-12
Public-6	May 4	COMB	PD-12
Public-7	May 4	COMB	PD-13
Public-8	May 4	COMB	PD-14
Public-9	May 4	COMB	PD-14
Public-10	May 4	COMB	PD-15
<b>Socioeconomics</b>			
68	March 28	COES	SOC-2

El Segundo Power Redevelopment Project  
(00-AFC-14)  
Response to Data Requests

**Data Response Guide (Cont.)**  
(Updated May 4, 2001)

<b>Data Request</b>	<b>Applicant's Response Date</b>	<b>Source of Data Request</b>	<b>Page</b>
69	March 28	COES	SOC-2
96	April 18	CEC	SOC-3
97	April 18	CEC	SOC-3
<b>Soil and Water</b>			
112	April 18	CEC	SOIL-3
113	April 18, April 30	CEC	SOIL-4, SOIL-17
114	April 18, April 30	CEC	SOIL-4, SOIL-19
115	April 18, April 30	CEC	SOIL-4, SOIL-19
116	April 18, April 30	CEC	SOIL-5, SOIL-20
117	April 18	CEC	SOIL-5
118	April 18, April 30	CEC	SOIL-6, SOIL-21
119	April 18	CEC	SOIL-6
120	April 18, April 30	CEC	SOIL-9, SOIL-24
121	April 18, April 30	CEC	SOIL-9, SOIL-24
122	April 18, April 30	CEC	SOIL-9, SOIL-24
123	April 18, April 30	CEC	SOIL-10, SOIL-25
124	April 18, April 30	CEC	SOIL-10, SOIL-26
125	April 18	CEC	SOIL-11
126	April 18	CEC	SOIL-11
127	April 18	CEC	SOIL-12
128	April 18	CEC	SOIL-12
129	April 18	CEC	SOIL-12
130	April 18	CEC	SOIL-13
131	April 18	CEC	SOIL-14
CCC-2	April 18	CCC	SOIL-15
CCC-3	April 18	CCC	SOIL-15
CCC-8	April 18	CCC	SOIL-15
CCC-9	April 18	CCC	SOIL-16
CCC-16	April 18	CCC	SOIL-16
CCC-24	April 18	CCC	SOIL-16
135	April 30	CEC	SOIL-26
136	April 30	CEC	SOIL-27
137	April 30	CEC	SOIL-27
138	April 30	CEC	SOIL-28
139	April 30	CEC	SOIL-29
140	April 30	CEC	SOIL-29

El Segundo Power Redevelopment Project  
(00-AFC-14)  
Response to Data Requests

**Data Response Guide (Cont.)**  
(Updated May 4, 2001)

<b>Data Request</b>	<b>Applicant's Response Date</b>	<b>Source of Data Request</b>	<b>Page</b>
141	April 30	CEC	SOIL-29
142	April 30	CEC	SOIL-31
143	April 30	CEC	SOIL-31
144	April 30	CEC	SOIL-32
145	April 30	CEC	SOIL-32
146	April 30	CEC	SOIL-33
147	April 30	CEC	SOIL-34
148	April 30	CEC	SOIL-35
149	April 30	CEC	SOIL-35
150	April 30	CEC	SOIL-36
151	April 30	CEC	SOIL-36
152	April 30	CEC	SOIL-37
153	April 30	CEC	SOIL-38
154	April 30	CEC	SOIL-39
155	April 30	CEC	SOIL-40
<b>Traffic and Transportation</b>			
30	March 28	CEC	T&T-2
31	March 28	CEC	T&T-2
32	March 28	CEC	T&T-3
33	March 28	CEC	T&T-3
34	March 28	CEC	T&T-4
62	March 28	CEC	T&T-4
63	March 28	CEC	T&T-5
64	March 28	CEC	T&T-5
87	March 28	COMB	T&T-5
CCC-20	April 18	CCC	T&T-6
33s	April 18	CEC	T&T-7
62s	April 18	CEC	T&T-11
<b>Transmission Line Safety and Nuisance</b>			
74	March 28	COES	TLSN-2
75	March 28	COES	TLSN-2
76	March 28	COES	TLSN-3
<b>Transmission System Engineering</b>			
98	April 18	CEC	TSE-2
74s	April 18	CEC	TSE-2
75s	April 18	CEC	TSE-2

El Segundo Power Redevelopment Project  
(00-AFC-14)  
Response to Data Requests

---

**Data Response Guide (Cont.)**  
(Updated May 4, 2001)

<b>Data Request</b>	<b>Applicant's Response Date</b>	<b>Source of Data Request</b>	<b>Page</b>
<b>Visual Resources</b>			
56	March 28	COES/COMB	VIS-2
57	March 28	COES/COMB	VIS-3
86	March 28	COMB	VIS-3
89	March 28	COMB	VIS-3
99	April 13	CEC	VIS-4
100	April 13	CEC	VIS-5
101	April 13	CEC	VIS-5
102	April 13	CEC	VIS-5
103	April 13	CEC	VIS-6
104	April 13	CEC	VIS-6
105	April 13	CEC	VIS-7
106	April 13	CEC	VIS-7
107	April 13	CEC	VIS-8
108	April 13	CEC	VIS-9
109	April 13	CEC	VIS-9
110	April 13	CEC	VIS-10
111	April 13	CEC	VIS-18
CCC-22	April 13	CCC	VIS-18
99s	May 4	CEC	VIS-20
100s	May 4	CEC	VIS-20
103s	May 4	CEC	VIS-20
105s	May 4	CEC	VIS-21
106s	May 4	CEC	VIS-22
110s	May 4	CEC	VIS-22
<b>Waste Management</b>			
CCC-23	April 18	CCC	WM-2
<b>Worker Safety</b>			
132	April 18	CEC	WS-2

El Segundo Power Redevelopment Project  
(00-AFC-14)  
Response to Data Requests

---

**Below is an updated data request chart for Cultural Resources. Place behind page CUL-1.**

<b>Cultural Resources (as of May 4, 2001)</b>			
11	March 28	CEC	CUL-2
12	March 28	CEC	CUL-2
13	March 28	CEC	CUL-6
14	March 28	CEC	CUL-6
15	March 28	CEC	CUL-7
16	March 28	CEC	CUL-10
17	March 28	CEC	CUL-11
18	March 28	CEC	CUL-11
90	April 18	CEC	CUL-12
91	April 18	CEC	CUL-12
CCC-18	April 18	CCC	CUL-12
15s	April 18	CEC	CUL-13
16s	May 4	CEC	CUL-14

**Technical Area:** Cultural Resources

**Author:** James Reede

**Supplemental Data Request No. 16.** Please confirm whether a cultural resource analysis was performed in the tank farm portion of the plant site.

*Supplemental Response No. 16.* The entire tank farm property was surveyed for potential cultural resources by Dr. Bryon Bass of URS Corporation as a part of his site reconnaissance efforts in September and October, 2000. No surface features of potential significance were identified during these surveys. Due to existing ground cover throughout the property (predominantly asphalt, existing tank structures and iceplant vegetation), ground visibility was limited. Consequently, as a part of the proposed mitigation program, the AFC recommends, and ESP II stipulates, that all ground disturbance activities will be monitored by a qualified archeologist.

Additionally, the tank farm site was surveyed and evaluated for historic built environment significance by Mr. Steve Mikesell of JRP Historical Resources. The tank farm site was deemed to not contain structures of historic significance.

El Segundo Power Redevelopment Project  
(00-AFC-14)  
Response to Data Requests

---

**Below is an updated data request chart for Geological Resources. Place behind page GEO-1.**

<b>Geology and Paleontology (as of May 4, 2001)</b>			
20	March 28	CEC	GEO-2
21	March 28	CEC	GEO-3
22	March 28	CEC	GEO-3
23	March 28	CEC	GEO-4
24	March 28	CEC	GEO-6
25	March 28	CEC	GEO-7
CCC-11 (CCC-6)	April 18	CCC	GEO-7
CCC-12 (CCC-7)	April 18	CCC	GEO-8
CCC-13	April 18	CCC	GEO-9
CCC-14	April 18	CCC	GEO-9
CCC-15	April 18	CCC	GEO-9
156	May 4	CEC	GEO-12

**Technical Area:** Geology and Paleontology  
**Author:** Robert Anderson

## BACKGROUND

It is CEC staff's understanding that the rock revetment along the western side of the El Segundo Generating Station was overtopped by seawater during a storm in January 1988, and that sea water entered a portion of the Station.

## DATA REQUEST

156. Please discuss your assessment of the ability of the rock revetment and sea wall to prevent the intrusion of sea water onto the El Segundo Generating Station via overtopping or breaching the sea wall and or rock revetment. Please specifically determine the elevation of the rock revetment and seawall needed to prevent the intrusion of seawater into the site during storms coupled with a high tide. If the revetment and seawall are found to be inadequate with respect to the prevention of sea water intrusion by breaching or overtopping the sea wall and rock revetment, then please devise and discuss mitigation measures to prevent sea water from breaching or over topping the sea wall and rock revetment.

**Response No. 156.** According to several technical articles in the Journal of the American Shore and Beach Preservation Association entitled "Shore & Beach" Vol. 57, No. 4, October 1989, the January 16-18, 1988 storms were an anomaly which combined high tides and storm generated waves to a pre-existing very high swell condition. The resultant computed annual return period of the observed wave conditions was 400 to 500 years (Seymour, 1989) based on recurrence interval estimates (Walker, 1984 and Walker, 1988). This severe storm created 25 to 29-foot waves in water depths of about 30 feet offshore of El Segundo (Egense, 1989). These articles will be made available as reference documents.

Another article states that beaches north of the Chevron groin eroded back 100 to 150 feet but significantly less near or south of the groin itself (Armstrong and Flick, 1989). Further, it states "The beach down coast of the groin was eroded back to the bicycle path and the rip-rap revetment along the ocean side of the path was damaged at numerous locations." The bike path and revetment were subsequently repaired. During this event, some wave runup did enter the plant site through a chain-link fence area. However, overtopping of the high perimeter wall was not observed by plant personnel (G. Person, 2001 personal communication).

The California Coastal Commission (CCC) normally requires that shoreline structures be designed to withstand the equivalent conditions of the 1982-83 winter storms (CCC Procedural Memo No. 19, 1992, provided here as Attachment 23). Those seasonal combined events may be considered equal to the 75 to 100-year storm event. The 1992



memo does not state that shoreline structures need to be designed for the 1988 storm conditions probably because it was such an anomalous, very rare event.

Hence, it is not required by the CCC to design for the storm conditions of 1988 but rather the 1982-83 events. Then the question becomes, “How did the plant site do in the winter of 1982-83?” The article written by Egense states that the 900-foot long Chevron groin was built in 1983-84 following the previous winter storms. It goes on to say “South of this groin, the beach is narrower, and is backed by a steep rubble mound revetment that protects the coastal frontage of the Southern California Edison station.” Based on this information, it must be assumed the Chevron Groin and revetment were designed to handle at least a similar winter 1982-83 storm.

However, what this also means is that the existing shoreline protection was not in-place during the winter 1982-83. Any wave run-up, overtopping, and damage caused by those storms happened without the shoreline protection currently in place. With that said, the existing shoreline protection may still be assumed to be adequate for a repeat event similar to the winter 1982-83 events.

CCC-approved hard shoreline protection structures (i.e., revetments and seawalls) normally top-out at +15 to +20 feet MLLW. Wide sandy beaches having an elevation of +10 to +12 feet MLLW are also excellent forms of shoreline protection. In this respect, the plant should have a perimeter wall system that is contiguous and has a minimum top-of-wall elevation. This elevation should be at least 5 to 10 feet higher than the bike path (say, elevation +25 to +30 feet MLLW). The perimeter wall would also be designed for swash wave impact forces such that failure or breaching does not occur.

Any section of the perimeter wall not fronted by the revetment should have its footing extended down to an appropriate depth (to be determined) or supported on piers/piles in order to mitigate the potential effects of shoreline erosion and undermining of the wall. Beach and revetment maintenance are the responsibility of the County of Los Angeles.

El Segundo Power Redevelopment Project  
(00-AFC-14)  
Response to Data Requests

---

**Below is an updated data request chart for Noise Resources. Place behind page NOI-1.**

Noise (as of May 4, 2001)			
28	March 28	CEC	NOI-2
133	April 13, April 18	CEC	NOI-2
134	April 13, April 18	CEC	NOI-4
CCC-21	April 18	CCC	NOI-5
28s	April 18	CEC	NOI-5
133s	May 4	CEC	NOI-7
134a	May 4	CEC	NOI-7
134b	May 4	CEC	NOI-10

## Supplemental Data Responses Based on April 18 Workshop

**Technical Area:** Noise

**Author:**

**Supplemental Data Request 133** – Update Figures 5.12-2 and 5.12-3 to include all recent noise monitoring activities.

*Supplemental Response No. 133.* The updated figures are provided in Attachment 24.

**Supplemental Data Request 134a- Operational Noise Impacts.** Please describe how the baseline noise levels at the nearest residence were determined and demonstrate that this complies with CEC, City of El Segundo and City of Manhattan Beach Laws Ordinances, Regulations and Standards (LORS). If the existing noise level determination does not comply with those LORS then provide a Noise Level Determination Plan in the form of a condition of certification that would ensure that an appropriate baseline noise level at the nearest residence will be established.

Please verify/ determine changes to noise levels at the nearest residence. If these changes result in noise impacts then provide mitigation. Even if these changes do not result in noise impacts, please provide a discussion of methods by which noise level changes could be reduced through mitigation (ie, treating noise levels at the source). Please consider and provide any additions or changes to standard CEC Condition of Certification, Noise-4 (25 Hour Community Noise Monitoring) that would ensure that actual noise impacts of ESPR are completely and accurately assessed and mitigated if required.

*Supplemental Response 134a:* Baseline noise levels were determined through noise measurements conducted in July, 2000 and August-September, 2000. Long-term noise measurements (25 hours in duration) were conducted on these two occasions along the southern boundary of the El Segundo Generating Station (ESGS). The measurement site identified as LT-2 in Figure 5.12-3 of the AFC (and as updated in Attachment 24) was located approximately halfway along the ESGS southern property line, in order to avoid undue influence from either beach and surf noise or from traffic noise along Vista Del Mar Boulevard. Site LT-2 was located on the chain-link fence of the ESGS property, across the street from residences that face 45<sup>th</sup> Street. The results of the long-term noise measurements are summarized in Table 5.12-1 of the AFC. As shown in Table 5.12-1, the two long-term noise measurements (LT-2 and LT-2a) were consistent; the 25-hour  $L_{eq}$  for LT-2 (conducted on July 20-21, 2000) was 58.6 dBA, and the 25-hour  $L_{eq}$  for LT-2A (conducted on August 30-September 1, 2000) was 58.3 dBA. Similarly, the 25-hour average  $L_{50}$  for LT-2 was 55.6 dBA, while the 25-hour average  $L_{50}$  for LT-2a was 57.3 dBA, and the 25-hour average  $L_{90}$  for LT-2 was 53.8 dBA, while the 25-hour average  $L_{90}$  for LT-2a was 55.8 dBA.

In response to Data Request 28, additional long-term noise monitoring data was submitted that showed the 15-minute and hourly average noise levels at each of the long-term monitoring sites. Examination of that data indicates that the quietest hourly ambient noise levels occurred during the July 20-21 noise measurement, during the 2300 – 0100 hours. The hourly Leq for both hours during this period were 53 dBA, the hourly L<sub>90</sub> for both hours was 50 dBA, and the hourly L<sub>50</sub> for both hours was 52 dBA. These lowest hourly noise levels form the basis of the “existing ambient” noise baseline along the southern boundary of the ESGS.

In response to Data Request 133, additional noise measurements were conducted that focused on the issue of noise effects from removal of the old oil storage tanks. The noise data collected from these measurements are shown in the attached table. The additional noise measurements were conducted during the late night/early morning hours of April 1 and 2, 2001. Late Sunday night/early Monday morning hours were selected for the measurements to capture a time when ambient noise levels would be very low. During this period, the existing El Segundo Generating Station (ESGS) was operating with units 1, 2 and 4 (unit 4 is the southernmost unit, facing the El Porto community). Unit 3 was down for scheduled maintenance.

Simultaneous noise measurements were conducted on the north and south sides of the old tanks. A sound level meter was located along the top of the northern side of the tank containment area, approximately 870 feet away from Unit 4, the southernmost power unit. In order to exclude noise from aircraft operations at Los Angeles International Airport, the noise measurement interval periods were short in duration (1 minute). The contributing noise sources at this location (ST-19) were a gas metering valve, ocean wave noise, and the units 1, 2 and 4. Because unit 4 is closest to the southern side of the ESGS property and because it has the most exposure to the south, the noise from unit 4 was the most audible of the three operating units. It was important to determine what the relative contribution of the gas metering valve noise and the wave noise was to the overall noise measurements at ST-19, and to thereby determine the noise level from the plant by itself. It is desirable to exclude the ocean wave noise from the ST-19 noise measurements because the ocean is not a component of the ESGS. It is also desirable to exclude the gas metering valve noise from the ST-19 noise measurements because although the valve is a component of the ESGS, its high-frequency characteristics are such that its noise contribution diminishes more rapidly with distance than the overall ESGS noise. As such, the gas metering valve noise is not audible at the southern property line, with or without the fuel oil tanks in place. These extraneous sources were accounted for by conducting separate noise measurements that isolated the noise from waves and the gas metering valve at a known distance. Noise measurement ST-20 was conducted approximately 50 feet from the breaking surf, and measurement ST-21 was conducted 85 feet from the noisy gas metering valve. By separately measuring each of these noise sources at close distance, other noises were effectively screened-out, by virtue of being substantially lower in noise level (10 dB or more) than the source of interest.

These supplemental noise measurements were then used to mathematically “deduct” (within the logarithmic domain in which noise levels combine and subtract) the influence of wave noise and gas metering valve noise from the measurements conducted at ST-19. The remainder is the actual noise level at ST-19 from the power plant. Using this noise level, the estimate for the noise level at the nearest residence from the plant without the storage tanks was derived by accounting for the additional distance to the nearest residence.

Concurrently with noise measurements at ST-19, noise measurements were conducted at the nearest residence, which is just south of the fuel oil storage tanks. The noise measurements were conducted at the 2<sup>nd</sup> story residence located at 4420 The Strand, in Manhattan Beach. Two sets of measurements were conducted at this location; a series of four measurements (designated as ST-18A) were conducted on the deck, overlooking the beach, and a series of five measurements (ST-18B) were conducted inside the residence, with the sound level meter pointed out of a north-facing open window. The intent of the ST-18B measurements was to minimize, to the extent practicable, the influence of the noise from the ocean waves. Comparison of the noise measurement data indicates that ST-18B noise levels were approximately 12 decibels (dB) lower than ST-18A. In both the ST-18A and the ST-18B locations, plant noise was not audible to the sound level meter operator.

It should be noted that the residence at which the ST-18 noise measurements were conducted represents the “worst-case” from the standpoint of tank removal, because that is the residence where the tanks provide the most shielding from the ESGS. At other residences either to the south of ST-18 or to the east, the existing shielding provided by the tanks diminishes. Consequently, any noise effects from tank removal would also be diminished.

Tank insertion loss calculations are provided in Attachment 29. Table 1 of the attached tables summarizes the measured ambient noise levels at the nearest residence (ST-18). Table 2 summarizes the estimated noise levels (based upon measurements at ST-19, ST-20 and ST-21) from ESGS at ST-18 without the tanks, and includes the additional 42.2 dB from units 5, 6 and 7 and associated equipment. Table 3 compares the measured ambient noise levels at ST-18 with the estimated no-tank noise levels at ST-18. Table 4 combines the measured ambient noise levels with the estimated no-tank noise levels, to arrive at the ambient-plus-ESGS noise levels at ST-18. Table 5 lists the resultant noise level increase, by subtracting the ambient-plus-ESGS noise levels at ST-18 from the measured ambient noise levels at ST-18. As shown in Table 5, the ambient plus-ESGS noise levels would increase by 0 to 1 dB in the ST-18A condition (with surf noise unshielded) and by 4 to 5 dB in the ST-18B condition (with surf noise shielded). Table 6 lists the subjective effects of changes in noise levels, based upon studies conducted by researchers on typical human responses to noise. As shown in Table 6, a change in noise levels of 5 decibels is considered to be “clearly perceptible”.

To summarize, the effect in the El Porto community of removing the old fuel oil storage tanks and of installing new equipment would be a noise level increase of not more than 5 decibels. At the worst-case analysis location (a residence located at the corner of 45<sup>th</sup> Street and The Strand), the overall increase in ambient plus project noise levels would be 4 to 5 decibels, during the quietest hours of the nighttime. During typical daytime ambient conditions, noise from the ESGS (including the proposed repower project) would not be audible. Noise level effects at other locations would diminish in direct proportion to the degree of shielding currently provided by the fuel oil storage tanks. At locations that currently do not receive any visual shielding from the tanks, removal of the tanks would have no noise effect.

Noise reduction measures for 4 are proposed as proposed condition Noise – A in Attachment 25 following the Tank Farm Plan; options for noise reduction include installation of noise-absorptive material, in the form of panels or blankets, around the noisiest machinery, ducts and pipes, with an emphasis on the equipment facing south, toward the El Porto community. A more drastic measure would be to construct a very large, acoustically treated enclosure around Units 3 and 4. Construction of an enclosure would present numerous challenges including site constraints (because of the limited size of the property) and economic constraints.

**Supplemental Data Request 134b – Construction Noise Impacts-** Please provide a comprehensive description of construction noise effects on the El Porto Community and provide any and all appropriate mitigation. As part of this analysis, demonstrate compliance with CEC, City of El Segundo and City of Manhattan Beach Laws Ordinances, Regulations and Standards (LORS). As part of this analysis, provide an accurate and clear description of the expected activities on the south end of ESGS (the tank farm area) that includes times, duration, and noise levels. Please include in such description maps depicting the use of this area during various phases with locations of activities, equipment and mitigation measures.

***Supplemental Response No. 134b.*** Please refer to Attachment 25, Tank Farm Plan, for a description of noise-generating activities that are anticipated to occur in the tank farm area during different phases of construction. These phases include:

Phase I: Prepare tank farm area  
Phase II: Demolition of Units 1 and 2  
Phase III: Construction of Units 5, 6 and 7  
Phase IV: Long-term operations.

For each phase of work, the plan explains the type and duration of activities anticipated to occur in the tank farm, the types of equipment required to accomplish the work, the hours of operation, and the noise levels anticipated from those activities. Figures are provided that summarize the major elements of each phase.

El Segundo Power Redevelopment Project  
(00-AFC-14)  
Response to Data Requests

---

**Below is an updated data request chart for Visual Resources. Place behind page VIS-1.**

<b>Visual Resources</b>			
56	March 28	COES/COMB	VIS-2
57	March 28	COES/COMB	VIS-3
86	March 28	COMB	VIS-3
89	March 28	COMB	VIS-3
99	April 13	CEC	VIS-4
100	April 13	CEC	VIS-5
101	April 13	CEC	VIS-5
102	April 13	CEC	VIS-5
103	April 13	CEC	VIS-6
104	April 13	CEC	VIS-6
105	April 13	CEC	VIS-7
106	April 13	CEC	VIS-7
107	April 13	CEC	VIS-8
108	April 13	CEC	VIS-9
109	April 13	CEC	VIS-9
110	April 13	CEC	VIS-10
111	April 13	CEC	VIS-18
CCC-22	April 13	CCC	VIS-18
99s	May 4	CEC	VIS-20
100s	May 4	CEC	VIS-20
103s	May 4	CEC	VIS-20
105s	May 4	CEC	VIS-21
106s	May 4	CEC	VIS-22
110s	May 4	CEC	VIS-22

**Technical Area: Visual Resources**

**Author:**

**Supplemental Data Request 99 - Update Maps and Plans.** Please show the structure depicted in the new visual renderings attached to the vertical HRSG's on site plans.

***Supplemental Response No. 99.***

As discussed in CEC workshops, the use of vertical HRSG's, necessary due to space constraints on the site, has led to some confusion over the makeup of the supporting equipment for the HRSG's. When asked by the CEC to render ESPR with more industrial character, photos of vertical HRSG's in South America and Europe were provided as the applicant was unable to obtain knowledge of any vertical HRSG's in the United States or North America. Unfortunately those photos were literally used to paint on a much larger structure for support equipment. After more communication with vertical HRSG vendors, it was determined that the renderings provided were erroneous because of their reliance on unsubstantiated pictures, and that the maps and plans depicting the footprint of the facility are entirely accurate. The framework shown in the original renderings of the project will actually hold the support equipment, with some bulging out in a few places.

Recognizing this mistake, ESP II is redrawing all KOP's that show the HRSG structures and will submit them not later than May 10, 2001. As discussed in later Data requests below, ESP II will be providing correct landscape renderings and treatment simulations using the corrected KOP's also.

**Supplemental Data Request 100. Update Maps and Plans –** Please update Figure 3.4-3B and 3.4-3C to show all structures such as the support structure shown in the visual renderings. (BnV)

***Supplemental Response No. 100.*** As discussed in the supplemental response to Data Request 99, above, ESP II provided renderings that greatly over-exaggerated and mis-drew the actual shape of the vertical HRSG's. The foreign nature of the vertical HRSG's prevented ESP II from making the correct determination of the industrial character of the vertical HRSG's in time to provide new renderings with this filing on May 4, 2001. These new KOP's will be filed not later than May 10, 2001. The new KOP's will remove the discrepancy between the maps and plans and the renderings.

**Supplemental Data Request 103 - Landscaping and Visual Enhancement Plan.** Please provide a landscaping and visual enhancement plan for the perimeters of and/or within the ESGS that would be satisfactory to the City of El Segundo and that provides visual enhancements to ESGS. Please address the frontage along Highway 1, and the North Perimeter. For the 45<sup>th</sup> Street boundary please incorporate the input and preferences of the El Porto Community in the plan. (RBF, Pat, BnV)



**Supplemental Response No. 103:** ESP II is working with the El Porto area residents, the City of El Segundo, and the City of Manhattan Beach to consider mutually agreeable project components that would satisfy the local community. In the tank farm plan, discussed in the public data requests below and attached as Attachment 25, ESP II is proposing the commitment of a 1.2 acre public use area. Other areas are also proposed for landscaping and screening efforts. Figures in Attachment 27, indicate areas for potential landscaping. A formal conceptual landscape plan is currently in development, and will depict the area around and adjacent to the ESPR site which contain landscaping opportunities. Pursuant to discussions with the City of El Segundo, edge treatment options have been explored, as well as edge landscaping for the proposed administration building and tree plantings within the parking lot. ESP II does not see any barriers to completing the development of the conceptual landscape plan. ESP II will commit to a condition requiring a completed formal conceptual landscape plan acceptable to the City of El Segundo if the CEC wishes.

As discussed in Data Request supplemental responses 99 and 100 above, the error over the correct depiction of industrial character of the HRSG's is requiring re-rendering of the northern KOP's. As a result, the landscape cannot be depicted for the Northern area at this time. ESP II is submitting renderings from the south in Attachment 26 and will provide renderings showing landscaping from the Northern KOP's not later than May 10, 2001.

**Supplemental Data Request 105. Visual Treatment Opportunities** - Please provide a better more in depth discussion of opportunities to visual treat the vertical HRSG structures in order to provide a more smoother more aesthetically pleasing appearance that diffuses the industrial character of the project. (RBF, Pat, BnV)

**Supplemental Response No. 105:** With regard to making the HRSG "less industrial" looking, the addition of a "skin" over all or part of the structure is the only identifiable means. However, in the case of ESGS, this could have a negative impact by drawing more attention to this compact site. An additional concern regarding a "skin" is that valuable space will be taken with structural steel members to support and brace the siding. The addition of any space requirement on this site makes the project more difficult to implement and the plant more difficult to maintain. The site is extremely space constrained and skins must accommodate space for maintenance.

A pop-off panel system might allow positioning of panels on the structure without sacrificing required maintenance needs nor as greatly increasing the mass. Even a "pop off" panel system will require a substructure of some type to support and brace the covering. Thus some valuable footprint space could be taken with structural steel support members. Depending upon the amount of coverage of the HRSG that is envisioned, the "pop off" panel system would cost more than a "skin", because each "pop off" panel

would have its own structural frame and each panel would be bolted to the girt system on the HRSG superstructure.

New renderings to be provided by May 10, 2001 will reflect use of “pop off” panels, as well as a more uniform color scheme to blend HRSG support structures with the HRSG units.

**Supplemental Data Request 106:** Provide supplemental simulations of landscape and architectural screening features shown on KOPs.

***Supplemental Response No. 106:*** Attachment 26 contains or will contain simulations of landscape screening and visual treatment renderings shown from selected KOPs. With the May 4 filing only the southern depiction is available as explained in supplemental responses to data requests 99 and 100. Further depictions from the north, will be provided not later than May 10, 2001 with the re-drawn KOP's

**Supplemental Data Request 110 - Air Parameters.** The exhaust temperature for the full load case with power augmentation and duct burner firing (336.3 deg F) seems unrealistically high, particularly in comparison with other similar projects where the exhaust temperatures are shown to be very similar for all operating cases. In comparison, the full load and 50% load without duct burner and power augmentation cases are 203.5 degF and 175 degF, respectively. The Applicant should identify why this much heat goes unrecovered for this one case. Is this some sort of proposed plume mitigation measure? In Table 2, the Applicant indicates that the moisture content for two of the modeled cases were “extrapolated” for each hour based on ambient temperature. For the staff to properly conduct their analysis the method of this extrapolation, or a table with the extrapolated values should be provided. Additionally, it may be more useful for the Applicant to define the ambient conditions (i.e. temperature/RH) when duct firing and power augmentation may be used so staff can model the full load case more realistically. Duct firing and power augmentation are generally used during high temperature/low relative humidity ambient conditions. The mass flow value for the full load case with duct burner operation and power augmentation is lower than the full load case without duct burner operation or power augmentation. The reason for this is not apparent, the Applicant should identify why the addition of duct firing and power augmentation does not increase the mass flow rate under full load.

**Supplemental Response No 110:**

Regarding exhaust temperature during full load case with power augmentation and duct burner operation – The exhaust temperature of 336.9 deg. F during the full load with duct burner and power augmentation operating case used for the visible plume modeling was provided by the engineering firm responsible for the design of the ESPR project. According to this firm, the higher exhaust temperature during this operating case is due to

the greater heating input into the heat recovery steam generator (HRSG) during this mode compared to the other full load operating cases. The exhaust temperature of 336.9 deg. F is not a visible plume mitigation measure.

Regarding extrapolation of moisture contents for two of the modeled cases based on ambient temperature – Due to the amount of data involved, we will submit in an electronic format a table summarizing the hourly extrapolated exhaust moisture contents for the two operating cases in question.

Regarding exhaust mass flow during full load case with power augmentation and duct firing – The full load operating case with duct burner and power augmentation is the hot ambient operating case with an ambient temperature of 83 deg. F. The full load operating case without duct burner and power augmentation is the cold ambient case with an ambient temperature of 41 deg. F. The gas turbine exhaust mass flow is based on the summation of mass flows for combustion air, fuel, and power augmentation steam injection. Of the three separate constituents of exhaust mass flow, the mass flow associated with combustion air is by far the largest contributor of the three accounting for more than 94% of the total exhaust flow. As the ambient temperature decreases, the density of the combustion air increases. Because gas turbines are constant air volume combustion units, at lower ambient temperatures during full load gas turbine operation, the combustion air mass flow increases. It is this difference in ambient temperature that results in the exhaust mass flow during the full load without duct burner/power augmentation operating case being higher than the exhaust mass flow during the full load with duct burner/power augmentation operating case.

El Segundo Power Redevelopment Project  
(00-AFC-14)  
Response to Data Requests

---

**Below is an updated data request chart for Project Description. Place behind page PD-1.**

<b>Project Description (as of May 4, 2001)</b>			
35	March 28	COES	PD-3
36	March 28	COES	PD-3
37	March 28	COES	PD-3
38	March 28	COES	PD-3
39	March 28	COES	PD-3
42	March 28	COES	PD-4
43	March 28	COES	PD-4
44	March 28	COES	PD-4
46	March 28	COES	PD-4
47	March 28	COES	PD-4
58	March 28	COES	PD-5
59	March 28	COES	PD-5
60	March 28	COES	PD-5
88	March 28	COES	PD-5
CCC-5	April 18	CCC	PD-6
CCC-6	April 18	CCC	PD-6
CCC-7	April 18	CCC	PD-7
COES-1	April 18	COES	PD-7
COES-2	April 18	COES	PD-8
38s	April 18	COES	PD-8
46s	April 18	COES	PD-9
88s	April 18	COES	PD-9
Public-1	May 4	COMB	PD-10
Public-2	May 4	COMB	PD-10
Public-3	May 4	COMB	PD-11
Public-4	May 4	COMB	PD-11
Public-5	May 4	COMB	PD-12
Public-6	May 4	COMB	PD-12
Public-7	May 4	COMB	PD-13
Public-8	May 4	COMB	PD-14
Public-9	May 4	COMB	PD-14
Public-10	May 4	COMB	PD-15

**Technical Area:** Project Description

**Author:** Residents of the City of Manhattan Beach

**Note to the reader: The following Public Data Requests and responses are provided in response to Workshop Comments from the El Porto Community Residents.**

**Public Data Request 1- Clearly Describe Tank Farm Activities** - Please describe in great detail what activities you will be performing in the tank farm portion of the property. As one member of the public put it “ We want to know what you will be doing, when you will be doing it, what it will look like, what it will sound like, and what it will smell like.”

**Response to Public Data Request 1:** Please refer to Attachment 25, Tank Farm Plan. As described in response to earlier data requests, this plan is intended to provide a comprehensive description of activities in the tank farm area. The tank farm plan breaks the use of the tank farm down into four phases, utilizes the existing tank or tanks for shielding of impacts, and carefully depicts what equipment will be used in each phase, how loud that equipment is and how noticeable activities will be to 45<sup>th</sup> street residents. Also, the Tank Farm Plan provides specific time based limitations on activities designed to ensure compliance with the City of Manhattan Beach exclusion period for construction activity.

**Public Data Request 2 - Future Uses of Tank Farm Area.** - Please explain what future uses are intended for the so-called “tank farm,” that is the southern lot that is being purchased for use as a laydown area during construction. Are you willing to set up a community task force to participate in evaluating or finding future uses for the south lot?

**Response to Public Data Request 2.** The tank farm area is being acquired to provide much needed laydown space during demolition of Units 1 and 2 and construction of Units 5, 6, and 7. At the end of the construction of the ESPR project the site will be remediated. Essentially this consists of removing a top layer of soil for disposal and replacement with clean soil. During construction, the northern berm and the western berm will be removed. The southern berm will remain for its screening and landscaping value that it provides to residences of the El Porto community. The flat area where the tanks are located will be repaved. An administration building is planned to be adjacent to and north of the tank farm. The paved area is intended for overflow parking, as it is used now.

ESP II also proposes to grant a public easement to a “L” shaped section on the southwest corner of the property allowing the property south of the southern berm (up to the top edge of the berm) and the area currently fronting the presently existing western berm.

This approximately 1.2 acre area would complement the existing beach area and open up the current tightness that exists as the beach bike trail merges with the pedestrian path and they both go around the existing corner to proceed north in front of the power plant.

Much concern has been raised regarding how the tank farm might be developed in the future. ESP II recognizes the reality, that although this parcel is zoned for Heavy Industrial, it is also adjacent to the El Porto community residences along 45<sup>th</sup> street. Obviously, any future development of this property would require that all permitting process be satisfied, including consideration of impacts to the El Porto community of the City of Manhattan Beach. ESP II has only one intention regarding this property, and that is that once construction is complete the property serve as a backup parking area. ESP II feels that the proposed donation of the public use area indicates the commitment that ESP II has towards remaining a good neighbor of the communities around it.

**Public Data Request 3 - Landscaping Opportunities.** What opportunities exist for berms and wide landscaping boundaries on 45<sup>th</sup> Street?

**Response No. Public- 3:** In regards to the area along 45<sup>th</sup> Street, the Applicant obtained input from interested residents at a Noise and Visual Community Meeting on April 12<sup>th</sup>. A CEC Noise and Visual Workshop held on April 18<sup>th</sup>, also provided an informal forum to discuss potential enhancements. A conceptual landscape plan is currently in development, and will be provided as soon as it is available. There is a 1.2-acre parcel of land on the southwest corner of the ESPR property, which is a landscaping opportunity, and is adjacent to 45<sup>th</sup> Street. As part of the Tank Farm Plan proposal, ESP II proposes to commit this 1.2 acres to public use and to assist in its development. Moreover, ESP II proposes to provide a pooled fund that could be allocated towards more noise reduction or more expenditure on landscaping and development of the 1,2 acres. This acreage is depicted in Attachment 27. Due to limited area and steep slope conditions on most of the 45<sup>th</sup> street edge, a berm beyond that already in place is not considered practical. Additionally, ESP II believes that most prevalent value is preservation of view points, even new viewpoints that can be opened up by removal of the tanks.

**Public Data Request 4 - What Tank Farm Activities Can Be Relocated?** - Of the activities being contemplated in the tank farm area, which ones could take place in a different location? What would be the effect of moving those activities in terms of reducing impacts to the El Porto community?

**Response to Public Data Request 4:** From feedback ESP II received regarding tank farm use, ESP II has significantly retooled the use of the tank farm area. A “tank farm plan” has been submitted as Attachment 25. In this plan, the uses of the tank farm are restricted. Additionally, the operation of a rock crusher has been moved to north of Units 3 and 4, in the location of Units 1 and 2. Much of the earthmoving operations, dumping of soil and rock and material fabrication will occur inside the tanks. These activities will occur only during the construction hours. All access to the site now uses the tanks as screening

devices. Activities south of the southern tank have been restricted. Collectively, these changes eliminate impacts to the El Porto community. Please also see the response to data request Public-6 where a community liaison officer is proposed.

**Public Data Request 5 - Noise Changes** - What will be the effect in the El Porto community in terms of noise level and character, of removing the old oil storage tanks and of installing new equipment? What is the basis for this assessment? What assurance do we have that this is accurate? What will happen and when if it is not?

**Response to Public 5:** Please refer to response to Data Request 134a for a complete review and analysis of the worst case increase in ambient noise levels. Summarizing, while noise levels in space not shielded from the ocean will not have a detectable increase in noise levels, spaces shielded from ocean noise could see an increase. The worst case increase at the closet residence (Western end or bottom of 45<sup>th</sup> street) is expected to be 4-5 dba. As houses further up 45<sup>th</sup> street are considered the existing shielding of the tanks is less effective translating to a lesser increase as a result in removal of the tanks. House midway up 45<sup>th</sup> street are already exposed to most Unit 4 noises, the main source of potential noise from ESGS on 45<sup>th</sup> street. Thus, the worst case increase of 4-5 dba is likely only at 2-3 residences on 4<sup>th</sup> street.

ESP II proposes to reduce noise levels from Unit 4 by 2dba through a noise reduction condition. (See second document in Attachment 25, containing proposed conditions of certification. Further, ESP II proposes to provide a pooled fund that could be allocated towards more noise reduction or more landscaping. The decision process for such allocation would need to be determined by the City of Manhattan Beach of these proposed conditions are acceptable. In any case,

**Public Data Request 6 - Land Values** - What effects will ESPR have on rental values and land values in the El Porto community during the construction phase? Which properties will be affected by Tank Farm activities? What about during the operational phase? What assurances do we have that this is accurate? What will happen if it is inaccurate?

**Response to Public 6:** ESP II is determined to not have adverse impacts on the El Porto community. To this end, ESPR includes the following characteristics:

- Construction activity focused on the north end of the site
- Repowering of Units 1 and 2 rather than addition of new units in south area
- Use of the tanks as “domes” during several phases of the construction
- Restrictions regarding when activities may be conducted on the tank farm area
- Restrictions regarding use of the area south of the south tank
- Placing access to the tank farm during construction on the western face of the property shielding truck noises from 45<sup>th</sup> street

- Proposed noise level reductions to offset changes brought on by removal of the tanks
- Restrictions of the use of lighting.

Obviously, a long construction period raises fears of property owners of dust, noise, light, and maze of construction equipment. These concerns are being addressed in the tank farm plan. No nighttime construction noise (before 7:30 AM and after 6:00 PM) will be allowed. No large trucks prior to 8:30 AM will access the tanks. No earth moving equipment will operate outside of the tanks prior to 8:30 AM.

ESP II proposes to accept a condition of certification requiring designation of a community liaison officer. Under this condition ESP II would be obligated to appoint a community liaison officer whose job would be to develop a relationship with the neighbors to the tank farm and establish a 24-hour communication ability with them. That person would be responsible for ensuring that these and all construction period restrictions are adhered to. That person would also be responsible for immediate investigation of all complaints regarding dust, noise, light, and/or general nuisance. All complaints would also be immediately reported to the CPM (the CEC's Compliance Project Manager). A monthly report would also be required regarding the adherence of the project to its restrictions and public feedback on that adherence.

During the operational phase, ESP II will have no significant impacts. Moreover, by the proposed public use area, the landscaping obligations, and the proposed noise reductions on Unit 4, ESPR should be an enhancement to the values and way of life of residents of the City of Manhattan Beach.

**Public Data Request 7 - Skin Feasibility.** Please explain the feasibility of encasing both the proposed new units 5, 6, & 7 as well as the existing Units 3 and 4 in a building or so called "skin". What impediments or barriers would you face to such an enhancement?

**Response to Public 7:** Encasing the existing or proposed units in buildings is impossible given the site constraints. This is driven mainly because the buildings would require space between the walls and units sufficient to allow cranes and major component removal. At present Units 3 and 4 have no such tolerance for needed space on the East and West ends. The new units have an even tighter fit while meanwhile requiring more space for maintenance requirements. For this reason a building style skin is not feasible.

For the new units, ESP II has evaluated and is providing renderings (not later than May 10, 2001) of visual treatment systems to be mounted on framework to cover up the view of piping, tanks, and other industrial characteristics of power plants.

The use of such panel systems on Units 3 and 4 would be extremely expensive. This is driven mainly by the fact that the existing structure of Units 3 and 4 was not engineered nor designed for such panel systems. In many cases panels would require new support structures and very intensive steel and grid work,



**Public Data Request 8 – Dust.** What dust will be generated on the south end of the property and how will you mitigate this in order to ensure it does not impact the El Porto Community?

**Response to Public Data Request 8.** Activities in the south tank farm will include stockpiling of excavated soil and crushed rock, as well as equipment staging, fabrication, and vehicular movement to and from the site. Each of these activities has the potential to create offsite dust unless dust sources are carefully controlled and monitored. The proposed use of the existing tanks for storage of some materials will contribute to overall dust management. Any exposed piles will be covered during non-working hours.

In general, the Applicant is committed to implementing appropriate construction practices designed to minimize construction dust at all work areas, including the south tank farm and offsite work locations. Typical dust control measures are listed in Stipulated Condition AQ-C1 (Section 5.2, page 5.2-80 of the AFC). Compliance with this condition requires adherence to the Construction Fugitive Dust Mitigation Plan which will be developed and approved at least 60 days prior to start of construction. Elements of the plan include:

- Employee parking on paved surfaces
- Frequent watering of unpaved roads and disturbed areas
- Use of appropriate chemical dust suppressants
- Use of gravel in high traffic areas
- Use of paved access aprons
- Use of posted speed limit signs
- Use of wheel washing areas prior to large trucks leaving the project site
- On-site monitoring.

ESP II is committed to ensuring that construction of ESPR does not disturb residents of the El Porto Community. In addition to the above measures, ESP II is proposing a Community Liaison Officer condition to facilitate communication and resolution of issues and concerns, and rapid termination of violations of requirements.

**Public Data Request 9 – Light.** What lighting will be used on the south end of the property during construction? How will these impact the El Porto Community? How can this be mitigated or reduced? What permanent changes will occur to lighting levels in the south end of the property? How can these changes be mitigated or reduced? What will be the effect of ESPR on light pollution

**Response to Public Data Request 9.** ESP II is proposing a condition of certification that would require that the south face of Unit 4 to be outfitted with lighting modifications designed to shield lighting and direct it inward and onto immediate working areas. This will serve to remove unnecessary light that may be visible from the southward following demolition of the fuel storage tanks. Please see attached Proposed Conditions of

Certification in Attachment 25. During each phase of construction, lighting will be focussed on work areas and shielded to minimize offsite glare. Very little lighting will be required in the tank farm area as very little activity will be allowed during dark hours. Lighting will mostly be security based lighting and that will be shielded and hooded.

**Public Data Request 10 - Soot.** Many residents in the El Porto community often find a layer of soot on surfaces such as cars, decks etc. Is the existing ESGS a source of that soot?

***Response to Public Data Request 10.*** Clean burning natural gas fuel has been the only fuel used at the station since the 1980's. The re-powering project will use only natural gas fuel also. Natural gas combustion does not cause noticeable amounts of soot; in addition no other activities occur on the property that would result in soot accumulation. Consequently, the plant should not be the source of soot in the community.